

WHAT IS CLAIMED IS:

1. A method of manufacturing an annular oblique light illumination apparatus having a frustconical inner circumferential surface as a light emitting device arranging surface, which comprises;

using a flexible wiring substrate in which a plurality of arcuate zonal wiring patterns for mounting light emitting devices each in the form of a developed frustconical shape are serpigginously formed continuously to a base film of a predetermined shape,

inserting electrodes of light emitting devices into the arcuate zonal wiring pattern parts and soldering them and then,

cutting out the arcuate zonal wiring patterns to form light emitting device arrays, and

fixing each light emitting device array to the arranging surface.

2. A method of manufacturing an annular oblique light illumination apparatus having a frustconical inner circumferential surface as a light emitting device arranging surface, which comprises;

using a flexible wiring substrate in which one or more annular stripe wiring patterns for mounting light emitting

devices each in the form of a developed frustconical shape when cut for a predetermined center angle are formed to a base film of a predetermined shape,

inserting electrodes of light emitting devices to an arcuate zonal parts corresponding to the center angle and soldering them,

then cutting out the arcuate zonal to form light emitting device arrays, and

fixing each light emitting device array to the arranging surface.

3. A method of manufacturing an annular oblique light illumination apparatus having a frustconical inner circumferential surface as a light emitting device arranging surface, which comprises;

using a flexible wiring substrate formed in which one or more arcuate zonal wiring patterns for mounting light emitting devices each in the form of a developed frustconical shape to a base film of a predetermined shape,

inserting electrodes of the light emitting devices to the wiring pattern parts and soldering them,

then cutting out the wiring patterns to form an device arrays, and

fixing each light emitting device array to the arranging surface.

4. A flexible wiring substrate for forming a light emitting device array attached to a frustconical inner circumferential surface as a light emitting device arranging surface of an annular oblique light illumination apparatus, wherein

a plurality of arcuate zonal wiring patterns for mounting light emitting devices each in the form of a developed frustconical shape are serpigginously formed continuously directly or by way of connecting wiring patterns to a base film of a predetermined shape.

5. A flexible wiring substrate for forming a light emitting device array attached to a frustconical inner circumferential surface as a light emitting device arranging surface of an annular oblique light illumination apparatus, wherein

one or more annular zonal wiring patterns for mounting light emitting devices each in the form of a developed frustconical shape when cut at a predetermined center angle are formed to a base film of a predetermined shape.

6. A flexible wiring substrate for forming a light emitting device array attached to a frustconical inner circumferential surface as a light emitting device arranging

surface of an annular oblique light illumination apparatus,
wherein

one or more arcuate zonal wiring patterns each
corresponding to a developed frustconical shape are formed to
a base film of a predetermined shape.

7. A flexible wiring substrate according to any one of
claims 4 to 6, wherein the base film of the predetermined
shape has a substantially square shape.